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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/564,649	08/09/2006	Peter Ossimitz	I431.141.101/FIN 559 PCT/	3352
25281	7590	10/21/2008	EXAMINER	
DICKE, BILLIG & CZAJA FIFTH STREET TOWERS 100 SOUTH FIFTH STREET, SUITE 2250 MINNEAPOLIS, MN 55402			THAI, LUAN C	
			ART UNIT	PAPER NUMBER
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/564,649	Applicant(s) OSSIMITZ, PETER	
	Examiner Luan C. Thai	Art Unit 2891	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 27-57 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 31-44 and 46-55 is/are allowed.
- 6) ☒ Claim(s) 27-30, 45, 56 and 57 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 13 January 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date <u>1/13/06</u> . | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

Priority

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.
2. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Information Disclosure Statement

3. The Information disclosure Statement filed on 01/13/06 has been considered.

Abstract

4. Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

Claim Rejections - 35 USC § 112

5. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

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6. Claims **27-30, 45, and 56-57**, are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claims **27, 45, and 56-57**, the expression “*such that an individual semiconductor component is rotated by substantially 90 degrees or 270 degrees with respect to four adjacent semiconductor components*” is unclear. It is confused that base on what feature of the semiconductor components to determine the rotation of one semiconductor component.

Claims **28-30** are rejected since each includes the limitations of independent claim **27**.

See that the claims above have been rendered indefinite and many have multiple 112 problems. Therefore, such claims have been examined as best understood by the examiner.

Claim Rejections - 35 USC § 102

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

8. Claims **27-30, 45, and 57** are rejected under 35 U.S.C. 102(b) as being anticipated by Norishima et al. (5,436,097).

Regarding claims **27-30, 45, and 57**, Norishima et al. (see specifically figures 3-7, Col. 2, line 45 to Col. 12, line 56) disclose a method for producing a rewiring substrate strip comprising:

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a rewiring substrate having several semiconductor component positions (316) configured for semiconductor components, wherein the component positions are arranged in rows and columns, a component group (See Fig. 7) defined by several semiconductor component positions with respect to one another such that an individual semiconductor component is rotated by substantially 90 degrees with respect to four adjacent semiconductor components separating the rewiring substrate strip into individual components (Col. 8, lines 15+), wherein the rewiring substrate strip is separated to comprise on opposite edges cut rewiring lines which led to test contact surfaces (44) on cutting strips of the rewiring substrate strip.

Claim Rejections - 35 USC § 103

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

10. Claim 56 is rejected under 35 U.S.C. 103(a) as being unpatentable over Norishima et al. (5,436,097).

Regarding claim 56, Norishima et al. discloses the claimed invention as detailed above except for the step of sorting out and marked the defective semiconductor components.

Although Norishima et al. lack a process step of sorting out and marked the defective semiconductor components, performing a testing step to avoid a defective semiconductor component after forming step is commonly applied in semiconductor art and would have been obvious to one of ordinary skill in the art. It would have been obvious to modify Norishima et al. accordingly for the purpose of avoiding the defective product in the manufacturing line.

Allowable Subject Matter

11. Claims 31-44 and 46-55 are allowance.
12. The following is a statement of reasons for the indication of allowable subject matter:

Claims 31-44 and 46-55 are allowable since the prior art made of record and considered pertinent to the applicant's disclosure, taken individually or in combination, fails to teach or fairly suggest, a detail and the structural interrelationship among external contacts, test contact surfaces on a rear side of the rewiring substrate strip being correspondingly aligned with respect to one another in such a manner that the arrangements of four next neighbors of a semiconductor component are rotated by uniformly 90 degrees or by uniformly 270 degrees with respect to the one arrangement in accordance with a predetermined plan, as being claimed in independent claim 31, and the step of mounting semiconductor chips on the top side of the rewiring substrate strip in the semiconductor component positions, applying external contacts in the semiconductor component positions to the external contact patches of the rewiring structure on the rear side of the rewiring substrate strip, and performing functional tests of the semiconductor chips, combined into component groups, by contacting the test contact surfaces, as recited in independent claim 46.

Since claims 32-44 and 47-55 depend on either claims 31 or 46, they are also allowed.

13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Luan Thai whose telephone number is 571-272-1935. The examiner can normally be reached on 8:00 AM - 4:30 PM, Monday to Friday.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sue A. Purvis can be reached on 571-272-1236. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

**/Luan C. Thai/
Primary Examiner, Art Unit 2891**

Luan Thai

Primary Examiner

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October 15, 2008